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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,354	07/06/2006	Osmo Pikkala	1034456-000039	2540

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EXAMINER

FISHMAN, MARINA

ART UNIT	PAPER NUMBER
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2832

NOTIFICATION DATE	DELIVERY MODE
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04/03/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary	Application No. 10/585,354	Applicant(s) PIKKALA ET AL.	
	Examiner Marina Fishman	Art Unit 2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

General status

1. This is a Final Action on the Merits. Claims 1 - 8 are pending in the case and are being examined.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Rakus et al. [US 5,969,314].

Rakus et al. disclose a switching device comprising

- a switching device comprising a frame [5, 7];
- a first connector [13, 65], and
- a second connector [15, 95];
- the first connector and the second connector extending from inside the frame to outside the frame,;
- means [23] for connecting the first and the second connector electrically to one another; and
- one or more gas flow openings [not numbered, disclosed in Figure 2] provided in the frame and arranged for a gas flow produced by a switching event, wherein the first connector

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comprises a hole [97, Figure 4] formed in a portion of the first connector located inside the frame, the hole provided for the gas flow.

Regarding Claim 2, the frame includes an upper part [5] and a lower part [7], the lower part being arranged to reside in the vicinity of frame structures of a mounting space, such as a switchgear cubicle, and that wherein each of said gas flow openings [only top holes close to upper part [5] are considered] provided in the frame resides farther from the lower part of the switching device than the first connector and the second connector.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bolongeat-Mobleu et al. [US 4,910,485] in view of Rakus et al. [US 5,969,314].

Bolongeat-Mobleu et al. disclose a switching device comprising

- a switching device comprising a frame [12];
- a first connector [32];
- a second connector [30];
- the first connector and the second connector extending from inside the frame to outside the frame;

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- means [14] for connecting the first and the second connector electrically to one another;
- one or more gas flow openings [not numbered] provided in the frame and arranged for a gas flow produced by a switching event.

Bolongeat-Mobleu et al., disclose all the claimed elements except for a portion of the first connector remaining inside the frame, the first connector comprises a hole. Rakus et al. discloses a first connector [65] remaining inside the frame comprises a hole [97]. It would have been obvious to one of ordinary skill in the art at the time the invention is made to provide a hole in the first connector of Bolongeat-Mobleu et al., as suggested by Rakus et al. in order to concentrate arc near the center of the arcing contact [Rakus et al., column 5, lines 52-54].

6. Claims 1 - 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemmer et al. [US 4,401,863] in view of Rakus et al. [US 5,969,314].

Lemmer et al. disclose a switching device comprising:

- a switching device comprising a frame [1, 2];
- a first connector [3]; and
- a second connector [4];
- the first connector and the second connector extending from inside the frame to outside the frame;
- means [7, 18] for connecting the first and the second connector electrically to one another; and

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- one or more gas flow openings [not numbered] provided in the frame and arranged for a gas flow produced by a switching event.

Lemmer et al. disclose all the claimed elements except for one or more gas openings and a portion of the first connector remaining inside the frame, the first connector comprises a hole. Lemmer et al. also discloses arc quenching plates [21], and gap between the means for connecting [7, 18] and the plates [Figure 6] on either side of means for connecting the contacts, which would form openings for the gases. Rakus et al. discloses a first connector [65] remaining inside the frame comprises a hole [97]. It would have been obvious to one of ordinary skill in the art at the time the invention is made to provide a hole in the first connector of Bolongeat-Mobleu et al., as suggested by Rakus et al. in order to concentrate arc near the center of the arcing contact [Rakus et al., column 5, lines 52-54] and provide gas openings at in the top frame for exhausting the gases.

Regarding Claim 2, the frame includes an upper part and a lower part, the lower part being arranged to reside in the vicinity of frame structures of a mounting space, such as a switchgear cubicle, and that wherein each of said gas flow openings provided in the frame resides farther from the lower part of the switching device than the first connector and the second connector. Regarding Claims 3 and 6, Lemmer et al discloses the first connector and the second connector are identical with one another. Regarding Claims 4, 5, 7 and 8, Lemmer et al. disclose the claimed invention except for specific dimensions of

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the gas flow openings. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide proper size of gas opening in a proper orientation, since it has been held that change in size or shape, only requires routine skill in the art. [In *Re Rose* 220 F2d 1048, 189 USPQ 143 (CCPA 1976) and In *Re Dailey* 357 F2d 669, 149 USPQ 47 (CCPA 1966). The motivation for providing the gas opening is to properly exhaust the gases away from the contacts.

Response to Arguments

7. Applicant's arguments filed 02/19/2008 have been fully considered but they are not persuasive.

8. Applicant has argued "the integral arcing contact and runner 65 is a separate component from the line side conductor 13. ... The integral arcing contact and runner 65 does not correspond to the first connector of claim 1 because no load current ever flows through the integral arcing contact and runner 65". The Examiner respectfully wishes to point out that the contact being integral or made from a number of pieces is not recited in the claim and hence the argument present is irrelevant; and whether a portion of the contact carries current or not is also not recited in the claim and hence the argument is irrelevant. As to the argument that a gas flow produced by a switching event will pass through gas flow openings provided in the top of the housing and that there is no reason for the gas flow to take a detour through a slot having a small area. The Examiner respectfully disagrees. As long as there is a slot present in the connector, the gas will flow through the slot, and thus the claim limitation is

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satisfied. The Applicant is also reminded that connector 2 of applicant's invention is provided in an area which is below the gas flow opening 11. As to the argument that the disclosed slot is a closed slot, the Examiner wishes to point out that closed slot in the connector does satisfy the limitation "a hole formed in a portion of the first connector located inside the frame."

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marina Fishman whose telephone number is (571)272-1991. The examiner can normally be reached on 7-5 M-T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax

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phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Elvin G Enad/
Supervisory Patent Examiner, Art
Unit 2832

/Marina Fishman/
Examiner, Art Unit 2832
March 27, 2008